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MEAN WELL

SWITCHING POWER SUPPLY

ISO-9001 CERTIFIED MANUFACTURER

MPS-30 SERIES

Jameco Part Number 220986 (MPS-30-12)

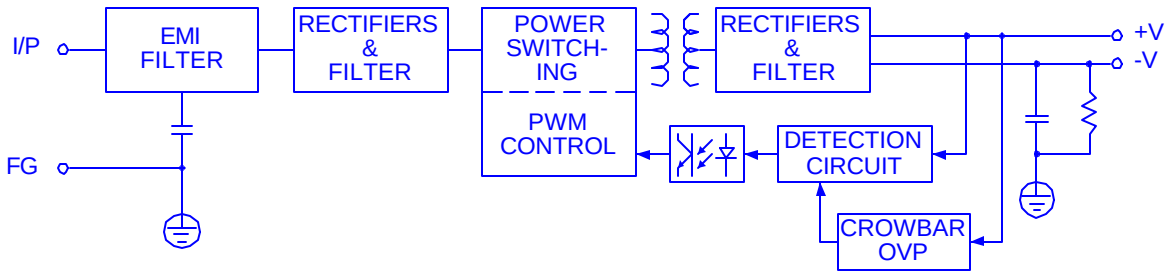
- .LOW COST, HIGH RELIABILITY
- .COMPACT SIZE, LIGHT WEIGHT
- .105º C OUTPUT CAPACITOR
- .100% FULL LOAD BURN-IN TEST
- .INTERNATIONAL AC INPUT RANGE
- .BUILT IN EMI FILTER, LOW RIPPLE NOISE
- .HIGH EFFICIENCY, LOW WORKING TEMPERATURE
- .MEDICAL APPLICATION
- .SOFT-START CIRCUIT, LIMITING AC SURGE CURRENT
- .SHORT CIRCUIT, OVERLOAD, OVER VOLTAGE PROTECTED

MODEL / SPECIFICATION	MPS-30-5	MPS-30-12	MPS-30-15	MPS-30-24	MPS-30-27	MPS-30-48
DC OUTPUT VOLTAGE	5V	12V	15V	24V	27V	48V
OUTPUT V. TOLERANCE	±3%	±3%	±3%	±3%	±3%	±2%
OUTPUT RATED CURRENT	5A	2.5A	2A	1.2A	1.1A	0.6A
OUTPUT CURRENT RANGE	0-5A	0-2.5A	0-2A	0-1.2A	0-1.1A	0-0.6A
RIPPLE & NOISE	80mV	120mV	150mV	240mV	240mV	240mV
LINE REGULATION	±1%	±1%	±0.5%	±0.5%	±0.5%	±0.5%
LOAD REGULATION	±2%	±1%	±1%	±1%	±1%	±1%
DC OUTPUT POWER	25W	30W	30W	28.8W	29.7W	28.8W
EFFICIENCY	72%	75%	76%	77%	78%	78%
INPUT VOLTAGE RANGE	88~264VAC 47~63Hz; 120~370VDC					
AC CURRENT	0.8A/115V 0.5A/230V					
INRUSH CURRENT	COLD START 35A/230VAC					
LEAKAGE CURRENT	<0.3mA/264VAC					
OVERLOAD PROTECTION	ABOVE 105% TYPE:PULSING HICCUP SHUTDOWN RESET:AUTO RECOVERY					
OVER VOLTAGE PROTECTION	110%~135%					
OVER TEMP. PROTECTION	U1 Tj 135º C TYPICALLY POWER SHUTDOWN					
TEMP. COEFFICIENT	±0.03% / º C (0~50º C)					
SETUP, RISE, HOLD UP TIME	500ms, 30ms, 10ms / 115VAC 500ms, 30ms, 50ms / 230VAC					
VIBRATION	10~500Hz, 2G 10min./1cycle, PERIOD FOR 60min. EACH AXES					
WITHSTAND VOLTAGE	I/P-O/P:4KVAC, I/P-FG:1.5KVAC, O/P-FG:SHORT					
ISOLATION RESISTANCE	I/P-O/P, I/P-FG:500VDC / 100M Ohms					
WORKING TEMP., HUMIDITY	-10º C~+50º C, 20%~90% RH(REFER TO OUTPUT DERATING CURVE)					
STORAGE TEMP., HUMIDITY	-20º C~+85º C, 10%~95% RH					
DIMENSION	101.6*65.8*25mm ONLY PCB					
WEIGHT	150gs					
SAFETY STANDARDS	EN60601-1,IEC601-1,UL2601-1 APPROVED					
EMC STANDARDS	CISPR11, FCC CLASS B ,IEC61000-4-2,3,4,5,6,8,11 VERIFICATION					

NOTE : 1.ALL PARAMETERS ARE SPECIFIED AT 230VAC INPUT, RATED LOAD, 25º C 70% RH. AMBIENT.
2.RIPPLE & NOISE ARE MEASURED AT 20MHz BY USING A 12" TWISTED PAIR TERMINATED WITH A 0.1uF & 47uF CAPACITOR.
3.LINE REGULATION IS MEASURED FROM LOW LINE TO HIGH LINE AT RATED LOAD.

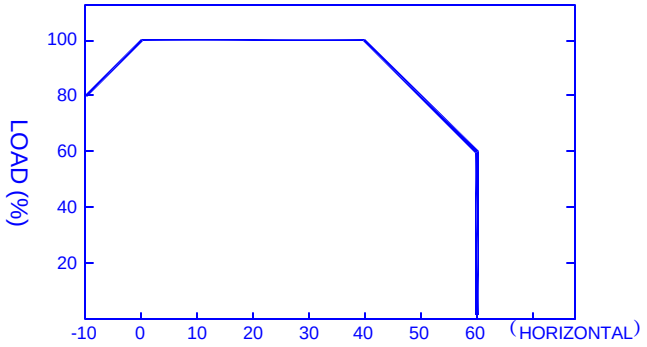
2002-04-18

BLOCK DIAGRAM



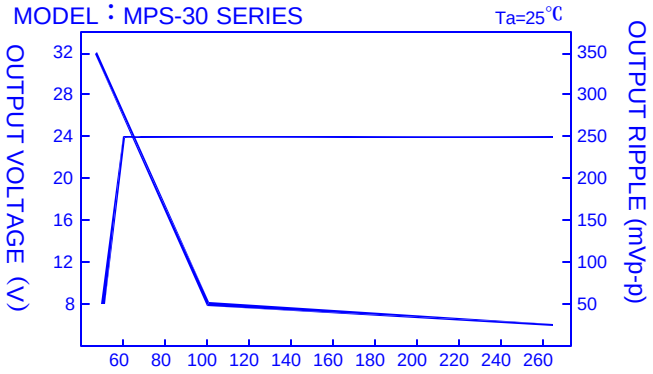
fosc:100KHz

OUTPUT DERATING



AMBIENT TEMP. (℃)

STATIC CHARACTERISTICS



INPUT VOLTAGE (V) 60Hz

DIMENSION (mm)

☒ CONNECTOR PIN NO. ASSIGNMENT

☒ CN1 : MOLEX 41791-5
PIN 1 : FG ⏚
PIN 3 : AC NEUTRAL
PIN 5 : AC LINE

☒ CN2 : MOLEX 41791-4
PIN 1,2 : DC OUTPUT COM
PIN 3,4 : DC OUTPUT V+

☒ MATING CONNECTORS

☒ CN1,2 MATING CONNECTOR TYPE MOLEX 2139 AND 3069 SERIES OR EQUIVALENT WITH MOLEX 2478 AND 2578 OR EQUIVALENT CRIMP TERMINALS